MALMSTROM AIR FORCE BASE, 564TH MISSILE SQUADRON,
QUEBEC MISSILE ALERT FACILITY
On State Highway 366 approximately 16 miles east of I-15
Shelby vicinity
Toole County
Montana

HAER MT-138-B
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
INTERMOUNTAIN REGIONAL OFFICE
National Park Service
U.S. Department of the Interior
12795 West Alameda Parkway
Denver, CO 80228

HISTORIC AMERICAN ENGINEERING RECORD
MALMSTROM AIR FORCE BASE, 564th MISSILE SQUADRON
QUEBEC MISSILE ALERT FACILITY

HAER No. MT-138-B

Location: On State Highway 366 approximately 16 miles east of Interstate 15 and 10.3 miles east of Ledger in the NE ¼ of Section 20, Township 29 North, Range 1 East, in the vicinity of Shelby, Toole County, Montana.

UTM: Zone 12 / 453533 Easting / 5345450 Northing

Date of Construction: Constructed as a Minuteman II system in 1966; converted to a Minuteman III system in 1996

Designer: Ralph M. Parsons Company, Los Angeles, California

Builder: Morrison Knudsen Company and Associates

Present Owner: U.S. Air Force (USAF), Malmstrom Air Force Base

Present Use: Deactivated Missile Alert Facility, 564th Missile Squadron, 341st Missile Wing

Significance: The Quebec Missile Alert Facility is one of five MAFs associated with the 564th, an Intercontinental Ballistic Missile (ICBM) squadron based at Malmstrom Air Force Base, Montana. An MAF houses the personnel and quipment required to remotely monitor, control and command operations of a group of 10 Minuteman missiles. Each missile is deployed in its own unmanned below-ground silo known as a Launch Facility (LF). An MAF is surrounded is by its 10 LF, with each LF at least 3 miles from it.

The Quebec and the 564th Missile Squadron's (MS) four other MAFs were determined representative examples of the infrastructure and unique technological system developed in response to the nation's Cold War defense and strategic deterrence needs. As such, they are historically significant for their association with the late twentieth-century defense policy of the United States. Military leaders found the rural Montana countryside surrounding Malmstrom Air Force ideally suited the needs of the Minuteman program, being situated within striking range of the Soviet Union. Of greater importance was the region's low population density which meant comparatively minimal loss of life in the event of nuclear attack.

Additionally, the Quebec MAF embodies some key aspects defining the Minuteman's technological superiority over its ICBM predecessors. Among the most significant of those was the consolidation of monitoring, control and command operations for a group of 10 missiles at a single central command facility. A two-person crew sat locked on constant 24-7 duty in the MAF's small and cramped underground portion which contained the controls and equipped for initiating missile launch. On Presidential command, each of the two crew members inserted a launch key which signaled crews at other MAFs to insert their launch keys. Actual missile launch could occur within less than one minute.

The Quebec and 564th MS's four other MAFs are also significant as representations of the architectural evolution of the MAF. Although of blast-resistant hard construction, the underground control and command portion of the Minuteman I MAF was still highly-vulnerable to the severe ground tremors associated with the spread of nuclear radiation, while life support facilities were concentrated in the soft or non-blast resistant portion of the structure only. Minuteman II designers addressed the need for better survivability of personnel and equipment by upgrading the MAF's hard underground portion with life support facilities as well as shock absorbing devices to maintain the structure steady if hit by nuclear tremors. The new MAF was expected to sustain a livable environment for two weeks after attack. Conversion of a Minuteman II MAF to a Minuteman III retained these improvements.

The Quebec MAF shares a similar exterior and interior layout with Papa MAF that was described in some detail in the comprehensive MAF report, HAER No. MT-138-A. The facility features a paved driveway leading to an enclosed facility that is accessed through a sliding security gate. Within the enclosed area is the MAF, paved parking/turnaround area, and above and below ground antennas. However, in contrast to the Papa MAF, the Quebec MAF faces east with the access to the facility located on the north side. Distinguishing features of the Quebec MAF are its interior aesthetics found both in its "soft" aboveground structures, which are not resistant to the effects of a nuclear attack, and its "hard" below-ground structures, which can withstand all but a direct nuclear attack.

The Quebec MAF divides into two specific areas: the "soft" above ground area called the Launch Control Support Building (LCSB) and the "hard" below ground area called the Launch Control Center (LCC). Like Papa MAF, the layout of both the LCSB and LCC are identical save for orientation of the building. The LCSB and LCC are both utilitarian in design but have specific aesthetic and facility-specific decorations, such as murals and framed images, which differentiate the Quebec MAF from the other four MAFs associated with the 564th MS and also characterizes the specific role of the LCSB and LCC.

The LCSB is decorated with framed images that pay tribute to Montana's wildlife and landscape. Immediately upon entrance to the facility this theme is apparent from the mission plaque in the entrance foyer of the Quebec MAF that reads:

> *"In God's wildness lies the hope of the world – the great unblighted, unredeemed wilderness." – Edward Abbey*
>
> *Welcome to Quebec Missile Alert Facility*
>
> *Montana's great vastness and many wilderness areas support the largest Grizzly Bear population south of Canada, and the nation's largest herd of Rocky Mountain Bighorn Sheep and migratory Elk.*
>
> *Believing the wildlife resources of Montana are valuable recreational and aesthetic assets, Quebec Missile Alert Facility honor Montana's diverse animal landscape.*

The mission plaque includes images of a black bear and an elk, portraying a theme that is continued in the recreation room, TV room, and dining room. These framed images include elk, deer, bighorn sheep, and other wildlife indigenous to the state. These images provide a more casual, recreational, and relaxing atmosphere, which is the purpose of these areas of the MAF.

Below ground, the tone of the aesthetics changes and focuses on the purpose of the Minuteman missile, the MAF, and the Missile Control Crew (MCC). The purpose of these

three entities was to monitor all missile functions and activities. Instead of framed images, below ground in the LCC, murals, MAF crew signatures, and wallpaper decorated by the MCC can be found on the walls, beams, blast doors, and air conditioning panels. The dominant mural is found in the tunnel junction between the two capsules. It is a circular mural with a yellow and blue background. The outer edges of the mural read "Remote Controlled Destruction" and "No Refueling – 30 Minutes Guaranteed" while the inner portion of the mural has a skull crossed with two missiles over a nuclear cloud. Over the cloud is written "DEUCE" and on either side of the image is written "Cable/Radio" and "Master/Slave." Around the blast door leading into the LCC are red, white, and blue stripes. A second mural is found immediately above the door inside the LCC capsule. This mural consists of a 564th MS patch with the missile. A third mural is found on the air-conditioning (AC) unit. It has an outline of the nation painted red, white, and blue and the title "Quebec Launch Control Center." Beneath the title reads, "Since 1967, Quebec crewmembers have provided the deterrence necessary to ensure the free world remains free. Take pride in what you accomplish today." The wallpaper theme in this LCC represents a scenic lake, again reflecting tribute paid to the natural environment of Montana by the Quebec MAF and its crew members.

ACRONYMS

AC	Air-conditioning
I	Interstate
LCC	Launch Control Center
LCSB	Launch Control Support Building
LF	Launch Facility
MAF	Missile Alert Facility
MAFB	Malmstrom Air Force Base
MCC	Missile Control Crew
MS	Missile Squadron
MW	Missile Wing
USAF	United States Air Force